

Notice of Allowability

Application No.

10/749,290

Examiner

Elias B. Hiruy

Applicant(s)

CAROLAN, KEVIN M.

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 05/20/2005.
2. ☒ The allowed claim(s) is/are 2-5, 7, 8, 13-18 and 20.
3. ☒ The drawings filed on 30 December 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DAVID MARTIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

DETAILED ACTION

Response to Argument/Remarks

1. Applicant's remarks and amendments filed on 05/20/05 is received and entered into record.
2. The drawing objection is withdrawn as the applicant no more refers to the feature omitted in the initial specification and claim.
3. The specification objection has been withdrawn in view of applicant corrections.
4. Claim 20 objection is withdrawn as the applicant has corrected the cited dependency problem in the earlier claim as filed.
5. Claim 6 rejection under 35 USC 112 second paragraph is withdrawn as the applicant has cancelled the claim.
6. The amended claims are reviewed in this office action and have been allowed based on their merit.

Allowable Subject Matter

7. The amended claims 2-5, 7-8, 13-18, and 20 are allowed.
8. The following is an examiner's statement of reasons for allowance:

Regarding independent claim 4, the prior arts teach methods that have similar functions as disclosed. For instance, Wiseman (US 6,667,595) discloses a method whereby the stall condition of the motor is determined by comparing the rise time of the current of different coils. However, none of the prior arts alone or in combination showed or taught the specific method that is found in the independent claim 1. Specifically the method of:

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"evaluating a state of the motor based upon the determined amount of time, said evaluating including determining a speed of the motor based upon the determined amount of time."

Regarding independent claim 7, none of the prior arts alone or in combination showed or taught the specific method that is found in the independent claim 1.

Specifically the method of:

"monitoring the voltage waveform through a low-pass filter and sampling a voltage waveform after a selected delay from the start of the initial rise time period: and determining an operational state of the motor from the monitoring of the voltage waveform."

Regarding independent claim 16, none of the prior arts alone or in combination showed or taught the specific method that is found in the independent claim 1.

Specifically the method of:

"detection means for determining an amount of time that elapses between when electrical power is supplied and when the reference level reached by the current, said detection means including a circuit that produces a voltage proportional to the amount of time that elapses; and analyzing means for evaluating a state of the motor based on the determination of the detection means."

Regarding independent claim 17, none of the prior arts alone or in combination showed or taught the specific method that is found in the independent claim 1.

Specifically the method of:

"analyzing means for evaluating a state of the motor based on the determination of the detection means, said analyzing means determining a speed of the motor."

Regarding independent claim 20, none of the prior arts alone or in combination showed or taught the specific method that is found in the independent claim 1.

Specifically the method of:

"detection means for monitoring the supplied electrical power, said detection means including a conditioning circuit through which a voltage associated with the supplied electrical power is sampled at a selected time delay after the electrical power is initially supplied, wherein the conditioning circuit is configured and the time delay selected so that the sampled voltage is below a threshold level when the motor is stalled; and, analyzing means for evaluating a state of the motor based on the monitoring of the detection means."

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. For additional arts cited, refer to the attached PTO-892 form.

Remarks

10. Thirteen claims are allowed.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elias B. Hiruy whose telephone number is 571-272-6105. The examiner can normally be reached on 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (571) 272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EH

08/05/05